

II. Claim Amendments

1. (Currently Amended) A device for adjusting and testing the axial force in screw joints, comprising:

a first force applying element in the form of a bolt, a nut, or the like, and further comprising a thread;

a second force applying element complementary to the thread;
a measuring element in the form of a washer contacting the first force applying element or the second force applying element, wherein the measuring element comprises a piezoresistive coating of an amorphous, diamond-like, carbon compound such that the electrical resistance of the measuring element is continuously variable as a function of the axial force applied by the first force applying element or the second force applying element to the washer; and

a component for fixing the first force applying element or the second force applying element and preventing rotation thereof comprising means for contacting the measuring element and for signal pick-up.

2-3. (Cancelled)

4. (Previously Presented) The device according to claim 1, wherein the means for signal value pick-up comprises contacts for galvanic, capacitive or inductive signal value transmission.

5. (Currently Amended) The device according to claim 1, wherein the means for signal value pick-up is designed for the simultaneous measurement of one or more signal values.

6. (Cancelled)

7. (Previously Presented) The device according to claim 1, wherein the device provides an electrical connection to the electrical earth.

8. (Previously presented) The device according to claim 1, wherein the screw joint comprises force-applying elements or connecting elements between the force-applying elements made of wood, metal or plastic.

9. (Currently Amended) The device according to claim 2 1, wherein the fixing component is designed for fixing recessed-head, slotted-head, hexagon, square and Allen-key bolts or the like.

10. (Previously presented) The device according to claim 1, wherein a device for acoustic or optical indication of adjusted axial force values is provided.

11. (Currently Amended) A device for adjusting and testing the axial force in screw joints, wherein the device includes a check device for limiting an axial force operating between force-applying elements of the screw joint, wherein the check device has means for signal value pick-up from an annular measuring element separate and distinct from any force applying elements, but acted on by at least one of the force applying elements, and whose electrical resistance is continuously variable as a function of the operative axial force applied to the screw joint, wherein the annular measuring element comprises a hollow circular cylinder, the hollow circular cylinder comprising, on the upper or lower side thereof, at least one piezoresistive layer or coating of an amorphous, diamond like, carbon compound.

12. (Currently Amended) The device according to claim 11, wherein the annular measuring element comprises a hollow circular cylinder comprises a core of commercial steel, special steel, hardened steel, titanium, aluminum, or glass fiber reinforced plastic carrying the at least one layer or coating.

13. (Cancelled)

14. (Currently Amended) The device according to claim 43 11, wherein the at least one piezoresistive layers layer or of material comprise a piezoresistive coating comprises graphitic structures with sp² hybridization in combination with diamond-like structures with sp³ hybridization.